

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number
WO 2004/108720 A1

(51) International Patent Classification⁷: **C07D 417/12**,
A61K 31/427, C07D 417/14

LALIBERTE, Sebastien [CA/CA]; 16711 Trans-Canada
Highway, Kirkland, Quebec H9H 3L1 (CA).

(21) International Application Number:
PCT/CA2004/000861

(74) Agent: **OGILVY RENAULT**; Suite 1600, 1981 McGill
College Avenue, Montreal, Québec H3A 2Y3 (CA).

(22) International Filing Date: 8 June 2004 (08.06.2004)

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/477,854 11 June 2003 (11.06.2003) US
60/511,038 14 October 2003 (14.10.2003) US

(71) Applicant (*for all designated States except US*):
MERCK FROSST CANADA & CO. [CA/CA]; 16711
Trans-Canada Highway, Kirkland, Quebec H9H 3L1 (CA).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **GAREAU, Yves**
[CA/CA]; 19671 Trans-Canada Highway, Kirkland, Que-
bec H9H 3L1 (CA). **JUTEAU, Helene** [CA/CA]; 16711
Trans-Canada Highway, Kirkland, Quebec H9H 3L1 (CA).
MACKAY, Bruce, D. [CA/CA]; 16711 Trans-Canada
Highway, Kirkland, Quebec H9H 3L1 (CA). **FRIESEN,**
Richard [CA/CA]; 16711 Trans-Canada Highway,
Kirkland, Quebec H9H 3L1 (CA). **GRIMM, Erich, L.**
[DE/CA]; 16711 Trans-Canada Highway, Kirkland, Que-
bec H9H 3L1 (CA). **BLOUIN, Marc** [CA/CA]; 16711
Trans-Canada Highway, Kirkland, Quebec H9H 3L1 (CA).

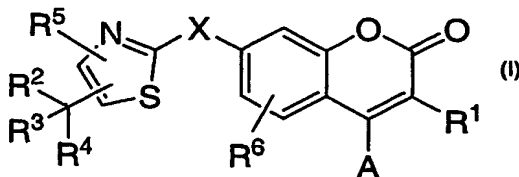
(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: 7- (1, 3-THIAZOL-2-YL)THIO!-COUMARIN DERIVATIVES AND THEIR USE AS LEUKOTRIENE BIOSYNTHESIS INHIBITORS



(57) Abstract: The instant invention provides compounds of Formula (I) which are leukotriene biosynthesis inhibitors. Compounds of formula (I) are useful as anti-asthmatic, anti-allergic, anti-inflammatory, cytoprotective and anti-atherosclerotic agents.